



DONALD T. DIFRANCESCO

Acting Governor

Department of Environmental Protection

Robert C. Shinn, Jr. Commissioner

NOV 2 0 2001

Edward A. Hogan Porzio, Bromberg & Newman 163 Madison Avenue Morristown, NJ 07960

Re: Hexcel Corporation (Hexcel)
Lodi Borough, Bergen County
ISRA Case #86009
Remedial Action Workplan Addendum Dated November 23, 1999 and Remedial Action

Reports (RARs) dated January 13, 2000 and February 28, 2000

Dear Mr. Hogan:

Please be advised that the New Jersey Department of Environmental Protection (NJDEP) has completed its review of the above referenced Remedial Action Workplan Addendum and RARs. The NJDEP's comments regarding the reports are noted below:

I Soil Comments

2-Phase Extraction

- 1. The proposal to treat the contaminated soils via the 2-Phase Extraction technology is conditionally acceptable. Be advised that the NJDEP is conditionally approving the remediation even though the elevated levels of volatile organic compounds (VOCs) have not been delineated to either NJDEP's residential direct contact soil cleanup criteria (RDCSCC) or impact to ground water soil cleanup criteria (IGWSCC) whichever is most stringent. This conditional approval is based upon Hexcel's proposal to utilize the treatment system in a stepwise approach. With this approach Hexcel can finish the delineation of the elevated levels of VOCs concurrently with the initiation of the 2-Phase Extraction system.
- 2. Be advised that the NJDEP's letters dated May 4, 1993 and October 26, 1993, which were the last letters sent by the NJDEP that address soil issues, conditionally approved additional delineation via a Hexcel proposed soil gas survey. The soil gas survey was never completed. Therefore, areas which contain elevated levels of VOCs have not been delineated. Hexcel shall complete the delineation of the elevated levels of VOCs concurrently with the initiation of the 2-Phase Extraction technology in Hexcel's newly designated area of concern, AOC-1A. This can be accomplished as AOC-1A does not appear to contain elevated levels of VOCs in the soil column. If elevated levels of VOCs have not been delineated in this area Hexcel may still initiate the 2-Phase Extraction system at AOC-1A as long as adequate post remedial sampling is completed in this area. Hexcel shall fast track the horizontal and vertical delineation of the elevated levels of VOCs in the other areas of the site in order to expeditiously complete the delineation prior to the initiation of the 2-Phase Extraction system at AOC-1B, the next area targeted for remediation.
- 3. Hexcel shall document the exact area of the site which is to be treated by the 2-Phase Extraction system. Specifically, Hexcel shall document how the 2-Phase Extraction will address all the elevated levels of contaminants as it does not appear from the maps submitted that the system targets all areas which contain elevated levels of contaminants. Hexcel shall submit revised site maps which depict the elevated levels of contaminants with their associated sample depths and the areas of the 2-Phase system which address these areas.

4. Hexcel has failed to submit a proposal for post remedial sampling. This is unacceptable. Therefore, Hexcel shall submit a proposal for post remedial soil sampling after the delineation of all contaminants has been completed.

AOC Designation: AOC 6: Remediation of PCB's

5. Be advised that the NJDEP is concerned about the direct contact exposure due to the elevated levels of PCBs (up to 26,000 ppm) detected in the surficial soils of the site in 1998 and 1999. It should be noted that Hexcel had previously documented (May 15, 1993 Monthly Progress Report) that "In the areas where soils exceeding cleanup standards have been identified, asphalt pavement exists. As such, there is no direct contact, dermal, ingestion or inhalation exposure risk associated with these soils". The NJDEP is now extremely concerned as these comments are not valid as indicated by the latest soil sampling results. As such, a potential direct contact health threat existed on the site for many years due to the elevated levels of PCBs detected in the surficial soils.

Hexcel has failed to adequately document why the additional PCB samples were collected in 1998 and 1999. This is unacceptable. Hexcel shall explicitly document why soil samples where collected for PCBs after many years of soil investigation inactivity. Hexcel shall document whether the discharges of PCBs were new or historical in nature. In addition, Hexcel shall document whether, based on the rationale and sample results from the recent round of surficial PCB soil samples, additional PCB surficial soil sampling is warranted for other areas of the site.

- 6. Hexcel has proposed to address the extremely elevated surficial soil PCB contamination via the excavation of a limited area . The proposal to excavate the elevated levels of PCBs appears to be premature as Hexcel has failed to horizontally and vertically delineate the elevated levels of PCBs in the southern off-site direction to the NJDEP's RDCSCC and to the non-residential direct contact soil cleanup criteria (NRDCSCC) on-site. However, be advised, that in order to expedite the cleanup of the potential health threat from surficially contaminated PCB soils, the proposal is conditionally acceptable provided Hexcel first delineates the PCB contamination prior to the proposed remediation. Further be advised that the PCB contamination shall be remediated to the NJDEP RDCSCC in the off-site direction. The remediation of the on-site contamination shall be completed in accordance with USEPA rules for PCB disposal (See Section III). Hexcel shall collect post excavation soil samples pursuant to N.J.A.C. 7:26E Technical Requirements for Site Remediation (TRSR).
- 7. Be advised that Hexcel's failure to include contaminant concentrations and sample depths on the site maps pursuant to the TRSR has led to difficult reviews on the part of the case team. This is unacceptable. Hexcel shall include the contaminant concentrations and sample depths on all future site maps as required pursuant to the TRSR. Additionally, Hexcel shall submit the boring logs for the recent soil samples and for the delineation and post excavation samples required above.
- 8. Further be advised that, after evaluating the current sample data with data from off-site samples PL-1 and PL-2 from the investigation of the neighboring Napp site, it is evident that Hexcel is also responsible for the contamination detected at these two locations. The investigation was documented in the Napp Technologies, Inc.'s February 22, 1996 Preliminary Assessment Report and the June 20, 1997 Remedial Investigation Report. The samples were collected along the edge of the Hexcel property with sample PL-1 containing 9.6 parts per million(ppm) PCB Aroclor 1248 and PL-2 containing 240ppm PCB Aroclor 1248, both at the 0-6" depth interval. As the depth interval, PCB Aroclor and sample location are consistent with current PCB contamination detected at the Hexcel facility, thus providing evidence of Hexcel's responsibility, Hexcel shall address the off-site contamination at both of these two sample locations pursuant to the TRSR and the requirements stated above.

In addition to the aforementioned sample locations Hexcel may also be responsible for the PCB contamination detected in Napp boring 501 which is located in an area along the edge of the Napp property immediately adjacent to Molnar Road and the Hexcel property and appears to be in direct line with the sample location HA-42. This sample location has not been delineated to the NJDEP's RDCSCC and both locations contain elevated levels of PCB Aroclor 1242 at the 3.5' depth interval. As a part of the delineation of the PCB contamination required above, Hexcel shall determine if the PCB contamination has migrated from the Hexcel site to the location of Napp boring 501. If this investigation concludes that the PCB contamination has migrated to the location of boring 501 then Hexcel shall remediate the area to the RDCSCC. Be advised that the soil investigation which includes this boring is documented in Napp's June 30, 1999 Remedial Investigation Report.

9. Hexcel proposes to address the elevated levels of PCBs detected above 100 ppm via the 2-Phase Extraction system. The proposal is acceptable. However the NJDEP does not agree that removal of contaminated ground water will have much effect on the residual soil concentrations even within the saturated zone. In any event the contamination shall be delineated to the RDCSCC both vertically and horizontally. If ground water sampling after the 2-Phase extraction reveals that additional source removal is necessary, the NJDEP will require further remediation of this area to address the ground water impacts.

AOC 9: Storm Sewer Outfall

10. Hexcel proposes no further action (NFA) based on the potential contribution of other sources and the U.S. Army Corps of Engineers plan to widen and deepen the Saddle River channel as a flood protection measure. The proposal for NFA is unacceptable as there is a much higher concentration of PCBs detected in sediment down gradient of Hexcel's storm sewer outfall than at other locations in the river and Hexcel has failed to substantiate the existence any other potential sources of the PCBs. Hexcel shall submit a proposal to remediate the PCB contaminated sediments detected down gradient of Hexcel's storm sewer outfall.

AOC-10 Industrial Sewer Line

- 11. The proposal to abandon the existing industrial sewer line is unacceptable. Be advised that it has come to the attention of the NJDEP via an investigation of the industrial sewer line on the adjacent Napp Technologies, Inc. (Napp) site that the sewer line has conveyed discharges of contaminants from the Hexcel facility to the Napp site. The investigation is documented in Napp's June 30, 1999 Remedial Investigation Report. As the investigation on the Napp property has indicated that the sewer line is not intact, Hexcel shall remove the industrial sewer line from its origin to the point on the adjacent Napp property where Napp ties into the line, excavate all contaminated soils encountered during the investigation and collect post excavation samples for PP+40 minus pesticides pursuant to the TRSR. Hexcel shall address all contamination which has emanated from the Hexcel site to the adjacent off-site properties.
- 12. Be advised, that the industrial sewer line has been an AOC which Hexcel has failed to address even though it has had knowledge of past discharges to this AOC. Furthermore, be advised, that the cleanup and reconditioning of the sewerage system was a requirement of the July 31, 1990 Cleanup Plan Approval. Hexcel's failure to address this AOC will no longer be tolerated by the NJDEP. If Hexcel does not address the industrial sewer line, including all discharges from the sewer line which have impacted the adjacent Napp site, then Hexcel will be in violation of the Industrial Site Recovery Act and appropriate enforcement actions will be initiated.

13. Hexcel shall submit a revised site map which depicts the exact location and extent from origin to discharge point of the entire industrial sewer line and any other underground piping which currently and/or formerly exists at the Hexcel facility.

Historical and any Newly Identified Areas of Concern (AOC)

14. Hexcel shall review all past and present AOCs (including all pits, trenches, catch basins, stained areas etc.), identified by both Hexcel and the NJDEP from the initiation of this ISRA case and submit a discussion on how the 2-Phase Extraction system will address the contamination at the AOC. Furthermore, this discussion shall include all AOCs which have been associated with Fine Organics Corporation ISRA case E97140. If the AOC has received a NFA then Hexcel shall document in which NJDEP letter the NFA was received. If the AOC has never received a NFA determination then the AOC is still considered open and shall be addressed per the TRSR.

Additionally, Hexcel shall evaluate any new discharges at these AOCs which have occurred during Fine Organics' occupancy at the site. The recent PCB sampling has indicated that additional discharges of contaminants have occurred since the last phase of soil sampling undertaken at the site.

Be advised that this review is required due to the extremely long lapse in time in which Hexcel has not completed any soil investigations and the potential for additional discharges which could have occurred since the last phase of soil sampling during the time period in which Fine Organics operated at the site from 1986-1998. In addition, the review is also required due to Hexcel's decision to rename the site's AOCs without indicating how the previously designated AOCs would be addressed pursuant to the TRSR.

Steam Tunnel

15. The June 1999 Napp report has indicated a discharge from the Hexcel site to the neighboring Napp site via Hexcel's industrial sewer. The NJDEP agrees with this assessment. Therefore, Hexcel shall re-investigate the steam tunnel to determine whether any discharges from the steam tunnel on the Hexcel site have impacted the neighboring Napp site. In addition, Hexcel shall verify that no additional discharges have occurred in the steam tunnel.

Storm Sewer Line

16. As there have been releases to the storm sewer line which traverses the neighboring Napp Technologies, Inc. site via the interconnection with the industrial sewer and also documentation of a discharge from the Hexcel facility to the neighboring Napp site, Hexcel shall address the storm sewer line via the collection of soils samples 0-6" below the base at a frequency pursuant to the TRSR. The sampling shall be completed from the origin of the storm sewer line to its discharge. The soil samples shall be analyzed for PP+40 minus pesticides.

Site Maps

17. Hexcel shall submit all future site maps with contaminant concentrations and sample depths pursuant to the TRSR.

Demolition Debris

18. Hexcel shall submit the disposal documentation for all of the demolition debris removed from the site. Specifically, Hexcel shall document how the PCB contaminated building material from the site was disposed.

NJDEP's May 4, 1993 and October 26, 1993 Letters

19. As Hexcel has not completed any type of soil investigation for numerous years prior to the submission of the November 23, 1999 RAW addendum. Hexcel shall verify that all of the requirements of the NJDEP's May 4, 1993 and October 26, 1993 letters have been addressed. At a minimum, Hexcel shall provide an item by item response addressing the requirements of each of these letters.

AOC designations

20. Hexcel shall be advised that when changing an AOC designation a cross reference to the historic AOCs shall be completed. Hexcel shall submit this cross reference with the next report.

Transformer

21. Be advised that NJDEP's September 15, 1994 letter requested information concerning a transformer identified in the NJDEP's September 15, 1986 Report of Inspection and Hexcel letter dated October 20, 1986 as a potential source of PCB contamination. Hexcel has failed to submit this information. This is unacceptable. Therefore, Hexcel shall document how the transformer has been addressed pursuant to the TRSR and whether this transformer is a source for any of the PCB contamination detected on site.

Il Ground Water Comments

Interim Water Elevation and LNAPL/DNAPL Monitoring and Recovery

Hexcel indicates that it is still performing the product monitoring and recovery program that the NJDEP approved as an interim remedial measure. Hexcel also submits a quarterly water elevation and product measurement table for February 1999 as required by the NJDEP.

NJDEP Comments:

1. The most recent quarterly product monitoring and recovery data received by the NJDEP is that for the second quarter of 1999. Hexcel shall clarify whether it is still performing the interim program and shall submit any and all outstanding monitoring and recovery data. Note that in the December 14, 1999 letter, the NJDEP approved Hexcel's July 27, 1999 proposal to continue performance of the interim product monitoring and recovery program and indicated that Hexcel must continue the program until it implemented the final remedial plan.

Horizontal Delineation of VOCs and PCBs (Includes Hexcel's AOC2)

Hexcel believes that additional ground water sampling to the south of Molnar Road is not necessary to achieve delineation of contamination related to the Hexcel site, based on the July 1998 ground water sampling results. Hexcel recalls that MW22, MW23 and MW24, located in Molnar Road, were sampled for VOCs and PCBs during the July 1998 round. Hexcel believes that ground water quality at each of these wells had improved significantly as of July 1998. Specifically, Hexcel reports that total target VOC concentration in MW22 decreased to about 1 ppm from a 1993 concentration of 405 ppm and that total target VOC concentration in MW23 decreased to less than 100 ppb from a 1995 concentration of 24 ppm. Hexcel reports that in MW24, the only compound detected in July 1998 was chlorobenzene, detected below the NJDEP's Ground Water Quality Standards (GWQS).

Hexcel also recalls that access to MW25, a Hexcel well located on Napp property, and to MWE8, a Napp well located on Napp property, was denied by Napp for the July 1998 sampling round. Hexcel notes that regardless, in January 1997 MWE8 contained a total VOC concentration of only about 20 ppb.

As required in the NJDEP's December 14, 1999 letter, Hexcel provides a copy of a July 21, 1998 letter that Hexcel sent to Napp wherein Hexcel requests access to sample MW25 and MWE8 on July 30, 1998. Hexcel reports that it followed the request with a number of telephone calls and that Napp denied the requested access during a July 30, 1998 telephone call.

Hexcel also provides a copy of an August 11, 1998 letter that Hexcel sent to Napp wherein Hexcel provides July 16, 1998 water elevation data for MW25 and MW31 (another Hexcel well located on Napp property.) In this letter, Hexcel documents that it has been forwarding quarterly water level data for the two wells to Napp in accordance with a site access agreement. Hexcel documents in the letter that during recent efforts to obtain access to sample one of the two wells, Napp informed Hexcel that the access agreement was no longer valid.

Also as required in the NJDEP's December 14, 1999 letter, Hexcel provides shallow well and deep well isoconcentration maps for the 1998 ground water sampling results. Specifically, Hexcel presents shallow isoconcentration maps for total target VOCs, selected individual VOCs and PCBs, and deep isoconcentration maps for total target VOCs and selected individual VOCs. Hexcel explains that PCB detections in deep wells were insufficient to create PCB contours.

NJDEP Comments:

2. The NJDEP acknowledges that the volatile organic compound (VOCs) concentrations in MW22 and MW23 were lower during the July 1998 round than they had been in previous rounds and that to date, MW24 has not contained significant contamination. Whether the data from the three wells was representative of ground water quality along the entire southern property boundary during July 1998 is not clear. Regardless, historical ground water quality data and ground water flow direction data for the Hexcel site and similar data submitted by Napp for its site (refer to Napp's June 1999 RIR/RIW Addendum) suggest that a certain amount of contamination has migrated from the Hexcel property onto the Napp site.

In Napp's June 1999 RIR/RIW, as far as the NJDEP understands, Napp attributes at least the following contamination to an origin at the Hexcel site:

VOCs and PCB 1242 in MW-E7; VOCs in MW-E7D; VOCs in MW-E13; LNAPL in MW-E14; PCB 1242 in MW-E9; Certain VOCs in MW-E1, MW-E5, MW-E6, MW-E9 and MW-E12.

Napp believes that the LNAPL in MW-E14, the PCB 1242 in MW9 and the VOCs in wells MW-E1, MW-E5, MW-E6, MW-E9 and MW-E12 in particular migrated onto the Napp site along the industrial sewer line.

The NJDEP has requested further clarification from Napp on its position regarding this issue, but believes that Napp's conclusions may be correct for the most part. If these contaminants did originate at the Hexcel site, Hexcel will be responsible for ensuring that they are delineated and remediated. Hexcel shall address this issue.

3. MW21 contained significant VOC contamination when sampled in July 1998. Hexcel shall submit a proposal for horizontal delineation of the VOC contamination in this well.

- 4. MW32B, CW-1, CW-2 and CW3 were not sampled in July 1998, but contained significant VOC contamination the last time that they were sampled. Hexcel shall sample these wells for VOCs to determine whether horizontal delineation of the contamination in them is necessary.
- 5. Hexcel shall attempt to renew its access agreement with Napp so that it can sample wells on Napp property and measure water elevations there as necessary.

Vertical Delineation of VOCs and Investigation of Silt Layer in the area of MW26 (Hexcel's AOC4)

Hexcel proposes to install five borings through the floor of former Building 2 to investigate the extent of the silt layer beneath it and to investigate the presence of dense non aqueous phase liquids (DNAPL). Hexcel proposes to advance the borings to a maximum depth of 22 feet, based on the depth at which the silt layer has been encountered at wells in the vicinity. If the layer is encountered above a depth of 22 feet the borings will be terminated at the top of it.

Continuous sampling will be performed throughout each boring for visual inspection and field screening. The material directly above the silt layer, if encountered, as well as directly above the concrete basin believed to underlie the building above the silt layer will be examined carefully for the presence of DNAPL.

Hexcel proposes to install one or two monitoring wells for vertical definition of the contamination beneath former Building 2 based on the results of the boring investigation.

If the silt layer is encountered at the boring near MW26, but a significant difference (greater than one foot) is found between the bottom of MW26 and the top of the silt layer at this boring, an additional shallow well will be installed at that location to monitor conditions directly above the silt. If the boring closest to MW26 encounters the silt layer but reveals that MW26 is set close (less than one foot) to the top of the silt, an additional shallow well will be considered unnecessary at this location and will not be installed. Also, if the silt layer is encountered in the other borings, Hexcel will install a shallow well at the boring with "the highest depth to the silt layer form the ground surface."

If the silt layer is not encountered during the boring program, then the contamination in MW26, which Hexcel indicates would at that point be considered representative of the lower aquifer, will be vertically delineated through installation of a deeper well constructed with a screen set across the interval screened by deep well MW7. Hexcel suggests that an absence of the silt layer would indicate that the construction fill for the subsurface structure extended through the confining layer. Hexcel would select a worst-case location for this deep well based on the visual inspection and field screening conducted during the boring program

- 6. Hexcel's proposal is acceptable but additional investigation may be required based on the results, especially if a breach is identified in the silt layer.
- 7. As indicated further below, active remediation of this area of the site is required given the concentrations of VOCs detected in MW26, RW6-1, RW6-2 and RW6-3. Hexcel has indicated that it must perform additional subsurface investigation in each of the areas targeted for 2-Phase Extraction in order to design the extraction systems for the areas. Assuming that Hexcel will address this area with 2-Phase Extraction, the NJDEP assumes that the same level of subsurface characterization will be required here as well.

Delineation of DNAPL Beneath Saddle River

As required, Hexcel provides the logs for the nine soil borings (ST1-ST9) that it advanced through the bed of the Saddle River in 1998 to address the NJDEP's concern about migration of DNAPL beneath Saddle River in the area of MW8. The logs indicate that borings ST1-ST4 and ST7-ST9 encountered the silt layer at depths ranging from 4 feet to approximately 6.5 feet below the stream bed. Logs indicates that borings ST5 and ST6 both extended to a depth of 6.5 feet below the stream bed but neither encountered the silt layer.

The logs indicate that PID readings registered in four of the nine borings, including the three that had been advanced closest to the stream bank (ST1, ST6 and ST9) and that were subsequently found to contain the most significant VOC contamination, and a fourth (ST5) located closer to the middle of the stream. The logs also indicate that all of the soil samples, which reportedly had been collected based on the PID readings, were collected from a six-inch interval directly above, and in some cases partially within, the silt layer, where applicable.

NJDEP Comments:

8. Based on the results of the soil sampling, further investigation of ground water quality across the Saddle River from the Hexcel site is not required at this time. The results of the soil samples that Hexcel collected under the river suggest that DNAPL has not migrated under the river in the area of MW8 and nearby control wells where it has been detected. Specifically, the VOC concentrations detected in the transect of soil samples collected immediately adjacent the Hexcel site (roughly 2 ppm to 6 ppm total target VOCs, mostly chlorobenzene) were not indicative of product, and the samples collected furthest from the site contained no VOCs at all. Additional investigation of contaminant migration under the river may be required in the future if data collected during pre-remediation activities at 2-Phase Extraction target area AOC1E warrants it.

Bedrock Investigation Near MW1 (Hexcel's AOC7)

Hexcel agrees to install a bedrock well near MW1. Hexcel proposes to install the well directly after the remediation of shallow overburden contamination in AOC1A, proposed below.

NJDEP Comments:

9. Hexcel's proposal is acceptable.

BNAs and PPM in Ground Water and Soil (Includes Hexcel's AOC3)

Hexcel believes that base neutral and acid extractable compounds (BNAs) and priority pollutant metals (PPM) are not of significant concern in soil or ground water based on historical data. Hexcel notes, specifically, that no known sources of metals contamination are present at the site.

Hexcel provides tables of all historical RDCSCC BNA and PPM exceedances in soil. The BNA results table shows that to date, four soil samples have contained one BNA exceedance, each, [bis(2-ethylhexyl)phthalate, benzo(a)anthracene or 2,6-dinitrotoluene] and that each exceedance was a minor exceedance of only the RDCSCC. The PPM results table shows that to date, seven soil samples have contained one or two metals (antimony, beryllium, cadmium, mercury, or thallium) above RDCSCC, the most stringent SCC, and that in all but one case the exceedance was within the same order of magnitude as the standard. Figures of the locations of soil samples analyzed for BNAs and PPMs and the locations of the referenced exceedances are provided.

Hexcel also provides tables of all historical BNA and PPM GWQS exceedances in ground water. The BNA results table shows that to date, shallow wells MW8, CW3, CW11 and CW12 have contained BNA exceedances not attributable to cross contamination. Various BNAs have been detected above GWQS in the four wells, primarily phenols, and concentrations have ranged up to

two orders of magnitude above GWQS. Concentrations have been highest in CW3. The PPM results table shows that to date, seventeen shallow wells and two deep wells have each contained one to eight metals above GWQS (arsenic, antimony, beryllium, cadmium, chromium, copper, lead, mercury, and nickel.) Concentrations have ranged up to two orders of magnitude above GWQS.

1

Hexcel proposes to perform additional ground water sampling for BNAs and PPMs in order to evaluate the potential impact of BNAs and PPMs on surface water and consequently, the need to sample surface water for these parameters as discussed further below, and in order to evaluate the need for post-remediation ground water sampling for BNAs. Specifically, Hexcel proposes to sample all shallow monitoring wells adjacent the river (MW8, MW10, MW14 and MW28) and two of the control wells adjacent the river (CW11 and CW12) for BNAs and PPMs and proposes to sample control well CW3, which is not located next to the river, for BNAs alone.

Hexcel proposes to evaluate the impact of turbidity on metals results by collecting all metals samples using the low flow purge method, and by collecting both filtered and unfiltered low flow samples as Hexcel does not expect even low flow samples to be completely free of particulates. Hexcel acknowledges that only results from unfiltered metals samples will be used by the NJDEP to evaluate GWQS exceedances.

Hexcel proposes to conduct all low flow sampling in accordance with EPA's *Ground Water Sampling Procedure Low Stress (Low Flow) Purging and Sampling* dated March 16, 1998. Hexcel reports that in accordance with EPA procedure, each well will be purged at a rate of between 100 to 500 milliliters per minute to maintain a steady flow rate without exceeding 0.3 feet of drawdown. Also, because the wells that will be sampled for metals have short screen lengths (10 feet and less) Hexcel proposes to purge and sample from the mid-point of the saturated screen at each well.

Hexcel indicates that it will measure pH, temperature, DO, Eh and conductivity to determine when a well has stabilized and will measure these parameters using a flow through cell and a turbidity meter. In accordance with the EPA procedure, a well will be considered ready for sample collection when indicator parameters have stabilized for three consecutive readings as follows:

- +/- 0.1 for pH ;
- +/- 3% for conductivity:
- +/- 10 mV for redox potential;
- +/- 10% for dissolved oxygen and turbidity.

Also, in accordance with the NJDEP's requirements, Hexcel will purge at least twice the volume of the sampling equipment.

Hexcel indicates that the BNA samples may or may not be collected at the same time that the PPM samples are collected. Hexcel proposes to use a peristaltic pump with dedicated tubing to purge wells and to collect the metals samples unless BNA samples are collected at the same time, in which case a non-dedicated centrifugal pump will be used. Hexcel would follow EPA procedures for pump decontamination.

- 10. As indicated in the NJDEP's December 14, 1999 letter, Hexcel's proposal to sample MW8, MW10, MW14, MW28, CW11 and CW12 for BNAs and PPMs in order to determine the need for sampling Saddle River for these parameters is acceptable. Hexcel shall see Condition No. 12, below, for further comment on the proposed PPM sampling.
- 11. While the BNA sampling that Hexcel proposes to perform includes all wells that have contained BNA concentrations above GWQS to date (MW8, CW3, CW11 and CW12), it is not

clear that resampling of only these wells and several others next to the river would reveal the actual present extent of BNA GWQS exceedances at the site. Specifically, the historical BNA sampling results on which the proposal has been based are now outdated and were not confirmed through resampling in most cases. Therefore, while the NJDEP acknowledges that BNA contamination appears to be less of a problem at the site than VOC contamination, Hexcel must still collect a representative site-wide round of samples for BNAs to ensure that the extent of BNA contamination at the site is understood and that all sources of BNA contamination will be, or have been, removed.

· · · ·)

The NJDEP expects that the proposed 2-Phase Extraction would reduce BNA concentrations and BNA source material to some extent, and observes that 2-Phase Extraction has been proposed for a significant portion of the site (MW8 and MW12 are located within proposed target area AOC-1E, CW-11 is located near AOC-1E and CW-3 is located near proposed target area AOC1A.) Therefore, as the NJDEP indicated in the December 14, 1999 letter, if Hexcel believes that the proposed remedial actions will remove all BNA source material at the site, the NJDEP will accept Hexcel's BNA sampling proposal as is. If Hexcel believes that the proposed remedial actions will not remove all BNA source material at the site, Hexcel shall propose to sample a representative selection of wells for BNAs so that Hexcel can plan any necessary remediation. Also, unless Hexcel samples a representative selection of wells for BNAs and demonstrates that BNAs in ground water are no longer of concern, post-remedial sampling for BNAs at representative wells at an appropriate time shall be proposed.

- 12. Hexcel shall more clearly specify what it believes are the source(s) of the metals historically detected above GWQS at the site, even if Hexcel believes that the detected concentrations were related to turbidity. As the NJDEP advised Hexcel in the December 14, 1999 letter, if Hexcel can demonstrate that a particular metal detected in ground water above GWQS is the result of historic fill or is naturally occurring, the NJDEP will not require any further ground water sampling, surface water sampling or remediation to address that metal (at most inclusion of the affected area in a CEA would be required.) If Hexcel cannot support a contention that a particular metal historically detected above GWQS is related to historic fill or is naturally occurring, then Hexcel shall propose to sample a representative selection of wells for that metal so that Hexcel can plan any necessary remedial action; sampling for that metal at only wells along the river would not be sufficient in this case.
- 13. Hexcel's proposal to sample ground water for PPMs, and possibly for BNAs, by using EPA low flow procedures is acceptable.

Remediation of NAPL and VOCs in Ground Water and Soil (Hexcel's AOC1 and AOC5)

Hexcel summarizes that DNAPL comprised of chlorinated solvents, light non-aqueous phase liquids (LNAPL) comprised of fuel oil and gasoline, and soil and ground water contaminated with VOCs are present at the site.

Hexcel provides a table of all historical NJDEP Impact to Ground Water Soil Cleanup Criteria (IGWSCC) VOC exceedances detected in soil. According to the table, VOCs detected in soil above IGWSCC have included numerous chlorinated compounds and xylene. The concentrations of the individual VOCs detected above IGWSCC have generally ranged up to the tens to thousands of parts per million.

According to the table, the IGWSCC exceedances have been detected at depths ranging largely from 0.5 feet below grade (b.g.) to 6.5 feet b.g., however some exceedances were detected between 7 feet b.g. and 15 feet b.g. Hexcel concludes that at borings where samples have been taken at various depths, concentrations generally increase with depth as Hexcel indicates would be expected of DNAPL-related contamination.

Hexcel provides a figure that shows all of the soil borings that have been sampled for VOCs and that shows which of the borings contained the tabulated IGWSCC exceedances at some depth. Hexcel concludes that VOCs detected in soil are limited to the former areas of USTs and ASTs.

Hexcel also provides tables of all historical VOC ground water sampling results for shallow wells and deep wells. According to the table and as previously established, numerous chlorinated compounds and BTEX are present in ground water above GWQS. Total target VOC concentrations per well have ranged up to the hundreds of parts per million in shallow wells and up to the single parts per million in deep wells. Hexcel concludes that dissolved VOCs have been delineated sufficiently to implement a remedial action.

To address the NAPL and VOCs in ground water and soil, Hexcel proposes to perform a program of 2-Phase Extraction in specific source areas. Hexcel explains that 2-Phase Extraction is a remedial process patented by Xerox and developed for remediation of VOCs in soil and ground water. Hexcel's consultant reports that it assisted in the development of the technology and provides references for successful 2-Phase Extraction programs that it has performed.

During the process a high vacuum is applied at a well to extract both liquid and vapor. Hexcel indicates that it selected 2-Phase Extraction because it can remove free and residual DNAPL and LNAPL, contaminated ground water and contaminants sorbed to soil simultaneously from a single area. Hexcel describes various other advantages that the technology provides that result in accelerated site remediation and reduction of project costs. Hexcel also reports that it performed 2-Phase-Extraction pilot tests at wells CW5 and MW17 in the southwest corner of the site (proposed remedial area AOC1A below) and that the testing indicated successful contaminant removal.

Hexcel indicates that much of the VOC contamination in the ground water is transferred to the vapor phase during the extraction process. Hexcel still expects recovered ground water to require treatment and intends to treat it by air stripping, granular activated carbon, and filtering.

Treated ground water will be discharged to the Passaic Valley Sewerage Commissioners (PVSC) sewer line. Hexcel indicates that its existing discharge permit was terminated in November 1998 at the request of PVSC when the ground water treatment system was dismantled. Hexcel reports that it has initiated the process of obtaining a new discharge permit. Also, Hexcel reports that a Treatment Works Approval will be required because the discharge to the PVSC is expected to exceed 8,000 gpd

Hexcel will treat vapor from the 2-Phase Extraction system and from the ground water air stripper and will discharge it to the atmosphere. Hexcel indicates that a new permit will be required for emissions from the 2-Phase Extraction system. Hexcel indicates that a temporary permit that it already possesses for emissions from its existing air stripper can be modified to permit emissions from it when it is relocated from the basement of Building 1 to the warehouse. Hexcel reports that it has initiated the air permitting process.

Hexcel also indicates that application of Hydrogen Release Compound (HRC), a proprietary compound marketed by Regenesis Bioremediation Products, may be proposed as a polishing step. Hexcel indicates that HRC is a food quality polyacetate ester that is capable of enhancing natural degradation of dissolved chlorinated solvent plumes. Hexcel's consultant provides a reference for its application of HRC at another ISRA site. Hexcel will assess the need for HRC application upon completion of 2-Phase Extraction at the site.

Hexcel has targeted six source areas (AOC1A through AOC1F), described below, for remediation by 2-Phase Extraction. Hexcel indicates that these source areas include areas of DNAPL and LNAPL as observed from ground water and product monitoring, and areas of VOC IGWSCC exceedances in soil. Hexcel indicates that former Building 2 will also be targeted for remediation

by 2-Phase Extraction if shown necessary by the results of the investigation proposed for that area.

Hexcel indicates that some of the targeted source areas adjoin each other, but have been divided into separate areas to accommodate application of 2-Phase Extraction. In the final design of the system, Hexcel may combine some of these areas.

AOC1A - Area close to the intersection of Main Street and Molnar Road

Ĭ

Hexcel reports that high methylene chloride concentrations have been detected in ground water in this area.

AOC1B - Area to the east of former Building 2

Hexcel reports that VOC IGWSCC and GWQS exceedances have been detected in soil and ground water in this area. Hexcel reports that neither LNAPL nor DNAPL has been detected in wells here but that MW4 and MW27 have typically contained very high concentrations of VOCs (over 100 ppm.)

AOC1C - Area of the basement pit and adjoining areas of soil contamination

Hexcel reports that the basement pit has been recognized as an area of concern because of the presence of DNAPL beneath the floor slab. Hexcel recalls that one of the well points in the basement was used for DNAPL recovery until recently, when the basement was secured with steel plates as part of demolition activities.

Also, in response to an NJDEP December 14, 1999 requirement, Hexcel reports that the seepage historically recovered from the basement of Building 1 was collected on the floor of the basement and not from within a pit set into the floor of the basement.

AOC1D - Area to the west of former Building 2

Hexcel reports that free product has been observed and recovered from wells in this area. Hexcel specifies that MW6, which is located in this area, is the only well that has consistently contained DNAPL over the past few years. Hexcel reports that ASTs were once located in this area and that soil sampling has indicated elevated concentrations of VOCs.

AOC1E - Area close to Saddle River property boundary

Hexcel reports that product monitoring has indicated the presence of DNAPL in some of the wells located along Saddle River. Hexcel notes that remediation of this source area is important for protection of Saddle River.

AOC1F - Vicinity of CW7

Hexcel reports that while no LNAPL has been detected in CW7 for almost a year, substantial LNAPL has been recovered from this well historically. Hexcel indicates that remediation of this source area will result in an improvement of ground water quality at down-gradient well MW10, which is located at the Saddle River property boundary.

Hexcel proposes to implement the 2-Phase Extraction at the six source areas in a stepwise approach, starting at AOC1A, the most up-gradient area, and proceeding to the furthest downgradient area.

Hexcel proposes to perform the 2-Phase Extraction program described below after completing the ground water and surface water investigations proposed above, and after completing the removal of shallow PCB soil contamination.

Before installation of the 2-Phase Extraction system in a given area, Hexcel will advance borings in the area to collect information about the subsurface necessary to design the extraction system for the area. Hexcel also reports that it is evaluating the need to perform an extended 2-Phase Extraction pilot test to collect data in each of the targeted areas.

During the design phase for each area, Hexcel will determine the need for installation of a containment structure, such as one constructed of sheet piling, to confine the applied vacuum to the target area. Also, while existing wells will be converted for use as extraction wells, Hexcel will evaluate the need for installation of additional extraction wells and monitoring wells during the design phase for each area.

Hexcel presents a map of the extraction well layout already designed for AOC1A. Hexcel's map shows that extraction will be performed at CW4, CW5, MW17 and MW18 and at up to four additional vapor extraction wells (VE-1 through VE-4.) Hexcel suggests that installation of a containment structure in this area has been determined necessary based on the results of the 2-Phase Extraction pilot testing that was performed in this area.

Before starting the 2-Phase Extraction in a given area, Hexcel will sample ground water at approximately six to eight wells in and around the area and will analyze the samples for VO+10 and PCBs to establish a pre-remediation baseline.

During operation of the 2-Phase Extraction system in a given area, Hexcel will measure parameters such as ground water flow, vapor flow, and vacuums, pressures and temperatures throughout the system. Hexcel will collect measurements once or twice per week at first and will then reduce collection to a weekly then a monthly frequency. Using the data, Hexcel will optimize system performance by cycling extraction wells on and off as necessary, with wells alternately functioning as extraction wells and observation wells.

Hexcel will also analyze recovered ground water and vapor for VOCs during operation of the 2-Phase Extraction system in a given area, in order to monitor mass removal rate, treatment efficiency and carbon loading. The sampling frequency and analytical methods will comply with the permit requirements.

During operation of the 2-Phase Extraction system in a given area, in order to determine the effectiveness of the operation Hexcel will monitor ground water quality and NAPL at the wells included in the baseline sampling. Samples will be collected quarterly at first, then semi-annually, and will be analyzed for VOCs. The NAPL observations will be made with an interface probe and will be made during weekly site visits.

To supplement the monitoring well data collected for a given area, and to verify that it is representative of the area, Hexcel will at some point use an alternative sampling technique, such as advancement of temporary well points, to sample ground water for VOCs and to investigate the presence of DNAPL in that area.

During operation of the 2-Phase Extraction system in a given area, Hexcel will also measure ground water elevations in the area to evaluate the capture zone being created by the extraction.

Furthermore, Hexcel will monitor all lower aquifer wells for VOCs during the entire remedial process in order to evaluate the success of the remediation. In response to the NJDEP's December 14, 1999 letter, Hexcel notes that VOC concentrations in MW3 will be monitored at part of this program. Hexcel will also include the proposed bedrock well in the monitoring program once it has been installed.

When VOC concentrations in the ground water and vapor extracted from a given area display an asymptotic decrease, Hexcel will terminate the 2-Phase Extraction operation in that area. The

containment structure for the area, if applicable, will then be removed. Hexcel estimates that 2-Phase Extraction will be conducted for an average of 9 months in each of the source areas.

Hexcel believes that the goals of the proposed active remedial program are consistent with the remedial requirements issued by the NJDEP in its May 27, 1998 letter. Hexcel suggests that the active remediation proposed above will continue until:

All free product (LNAPL and DNAPL) has been removed;

Concentrations of individual VOCs in ground water are less than 1% of the compounds' solubilities;

No increasing VOC concentration trend is evident in the lower overburden aquifer; No increasing VOC concentration trend is evident in monitoring wells along the Saddle River [assuming surface water complies with SWQC at that time.]

Hexcel believes that upon completion of the remedial actions proposed above, site related sources will have been removed or contained sufficiently to enter into a natural remediation monitoring program and to apply institutional and engineering controls.

- 14. Hexcel's proposal to use 2-Phase Extraction and possibly HRC to attempt to remediate VOC ground water contamination and its sources is acceptable. The proposed actions will not provide containment of source material but are acceptable because they are intended to remove the source material within a reasonable amount of time. If adverse impact to a receptor such as surface water or unacceptable contaminant migration is identified or predicted to occur during the 2-Phase Extraction, additional measures such as acceleration of the source removal program or hydraulic containment will be required.
- 15. Hexcel shall perform active remediation such as 2-Phase Extraction in the area of MW26, RW6-1, RW6-2 and RW6-3, and in the area that extends from this area to MW21, given the concentrations of VOCs that have been detected in these five wells. Hexcel may need to remediate the area of MW26, RW6-1, RW6-2 and RW6-3 toward the beginning of its remedial program given its proposed strategy of remediating up-gradient areas first.
- 16. Hexcel shall evaluate the need to actively remediate other areas of the site on the basis of the horizontal delineation and resampling of wells required above.
- 17. Hexcel shall evaluate the need to incorporate areas of the Napp property into its remedial program (with respect to both active remediation and monitoring) based on the evaluation of data for the Napp site required above.
- 18. Once Hexcel has finalized the 2-Phase Extraction system design for a given area, Hexcel shall submit a proposal for the system for review and approval. In the proposal Hexcel shall provide an illustration of the area that is to be remediated, shall indicate the depth to which the remediation will extend, shall indicate the wells that will be used for extraction and ground water monitoring and shall provide the elevations of the wells' screened intervals with respect to the water table and the silt layer.
- 19. Hexcel shall submit a proposal to perform a site-wide, upper aquifer water quality and product monitoring program during the course of the 2-Phase Extraction program. This monitoring must be performed in addition to the shallow well monitoring that Hexcel has proposed to perform in each target source area as each area is remediated.
- 20. Discontinuation of the previously approved interim product recovery program may be acceptable, however, Hexcel shall continue to recover any and all significant product accumulations in wells located next to Saddle River during the 2-Phase Extraction program.

Hexcel shall ensure that the monitoring program required above includes monitoring of those wells located next to the river that have historically contained product.

- 21. Hexcel shall propose a sampling frequency for the lower aquifer overburden and bedrock monitoring that will be performed during the 2-Phase Extraction program.
- 22. Hexcel's proposal to terminate 2-Phase Extraction at a given area when VOC concentration trends in recovered ground water and vapor display an asymptotic decrease is acceptable provided product is not evident in any well in the target area at that time, and provided the concentrations of each compound detected in monitoring wells in the area at that time are below 1% of the compound's effective solubility. If concentrations rebound after cessation of the 2-Phase Extraction or product reappears, active remediation of the area shall be resumed. Pursuant to the Technical Requirements for Site Remediation at N.J.A.C. 7:26E-6.1(d) "Free and/or residual product determined to be present pursuant to N.J.A.C. 7:26E-2.1(a)11 shall be treated or removed when practicable, or contained when treatment or removal are not practicable." At N.J.A.C. 7:26E-2.1(a)11i, the Technical Requirements for Site Remediation specify "...free and/or residual product shall be considered to be present if the contaminant is detected in ground water at concentrations equal to or greater than one percent of the water solubility of the contaminant if ground water contains only that organic contaminant. If a mixture of such contaminants is present, then the effective water solubility of the contaminant shall be estimated for this determination:"
- 23. Once Hexcel has fully delineated the extent of site related ground water contamination Hexcel shall submit a proposal for establishment of a CEA. The CEA shall pertain to all site-related GWQS exceedances including, but not necessarily limited, to VOCs. The boundaries of the CEA may coincide with the known extent of contamination at that time, and the duration may be indefinite. Revision of the CEA will be required at some time after completion of active remediation.

Remediation of PCBs in Soil and Ground Water (Hexcel's AOC6)

Hexcel summarizes that PCBs have been detected in both soil and ground water as well as in the DNAPL and LNAPL that is present at the site.

Hexcel provides a table of all PCB soil sampling results obtained to date and highlights those concentrations above 100 ppm According to the table, total PCBs per soil sample have ranged up to 26,000 ppm.

According to the table, total PCB concentrations above 100 ppm have been detected at depths ranging from the ground surface to 16 feet b.g. Hexcel recognizes these concentrations as occurring within the upper two feet of soil and at depths below 5 feet. Hexcel notes that while various aroclors have been detected, the shallower exceedances are mostly 1248 and the deeper exceedances are mostly 1242.

Hexcel provides a figure that shows all of the borings that have been sampled for PCBs and that shows which of the borings have contained PCBs at concentrations above 100 ppm. Hexcel concludes that the PCB concentrations above 100 ppm detected within the upper two feet of soil are limited to an area close to the former boiler room and that the PCB concentrations above 100 ppm detected below five feet occur in a few isolated locations and are primarily related to DNAPL..

Hexcel also provides tables of all historical PCB ground water sampling results for shallow wells and deep wells. According to the table and as already established, PCBs have totaled up to 2,170 ppb per well in shallow wells and up to 1.5 ppb per well in deep wells. Aroclors were limited to 1242 and to a less extent 1248.

Hexcel concludes that relatively low concentrations of PCBs have been detected in ground water because of the tendency of PCBs to adsorb to soil. Hexcel recalls that an affinity of PCBs for soil particles was demonstrated earlier in the site investigation through analysis of both filtered and unfiltered ground water samples from selected wells.

Hexcel proposes to address the deep PCB soil contamination for the purpose of protecting ground water. Specifically, Hexcel indicates that the deeper PCB soil contamination falls within the areas proposed to be addressed by 2-Phase Extraction, and that through removal of ground water and NAPL during the 2-Phase Extraction, mobile PCBs will be contained and PCB concentrations will be reduced.

Hexcel proposes, therefore, to reevaluate the PCB concentrations in soil at depth with respect to their impact on ground water quality after implementation of the 2-Phase Extraction. Hexcel will remove additional PCB contamination, if necessary, at that time. A petition for a risk-based alternate standard will be submitted to the regional USEPA administrator and to the NJDEP case manager for consideration if PCBs exceed accepted levels after completion of the necessary remediation.

NJDEP Comments:

- 24. Hexcel's proposal to attempt to eliminate the sources of the PCBs in ground water through 2-Phase Extraction is acceptable. The NJDEP notes that all of the wells that were found to contain significant PCB contamination are located within areas targeted for 2-Phase Extraction.
- 25. Hexcel has not provided a proposal for further sampling of ground water for PCBs. Hexcel shall propose to collect post-remedial samples for PCBs from representative wells at an appropriate time. Hexcel may want to consider using the low-flow technique for the required sampling. Only unfiltered samples will be used for comparison to the GWQC.

Saddle River (Hexcel's AOC8 and AOC9)

Hexcel proposes to evaluate potential impacts to Saddle River by conducting an inspection for stressed vegetation along the river bank and in unpaved portions of the site, and by performing surface water analysis and sediment evaluation and analysis. Hexcel suggests that the proposed actions constitute the baseline ecological evaluation as well as the remedial ecological investigation required by the Technical Requirements for Site Remediation.

Surface Water

Hexcel agrees to sample surface water at the locations required by the NJDEP. Hexcel proposes to analyze samples for VOCs and PCBs and, as indicated above, to include analysis for BNAs and PPMs if appropriate based on the proposed BNA and PPM ground water analyses. Hexcel specifies that if BNA or PPM concentrations exceed GWQC in wells located along the Saddle River, surface water samples will be analyzed for BNAs and PPMs.

- 26. Hexcel's proposal is acceptable with the condition that exceedance of the more stringent of the State SWQC and the Federal SWQC in monitoring wells next to Saddle River be used to trigger surface water sampling for BNAs and PPMs and not exceedance of the GWQC, consistent with the Technical Requirements for Site Remediation at N.JA.C.7:26E-3.8(a)4.
- 27. Hexcel indicates that Saddle River's FW-2 designation denotes that it is not presently used for potable purpose. Hexcel is advised that an FW-2 designation does not denote whether a surface water body is used for potable purpose. Hexcel is referred to the Surface Water Quality Standards at N.J.AC. 7:9B-1.12(c) for the designated uses of FW2 waters.

Production Well (Hexcel's AOC11)

Hexcel reports that its on-site production well is 240 feet deep and is cased to 38 feet. Hexcel reports that the well has not been used since operations at the site ceased. Hexcel proposes to abandon the well.

NJDEP Comments:

As reported in the July 2, 1992 Bedrock Aquifer Characterization Report, the production well was packer- sampled in April 1992. Samples were analyzed for VOC+15. TCE was detected at up to 76 ppb, TCE at up to 6 ppb, toluene at up to 21 ppb and MTBE at up to 2 ppb.

28. Hexcel shall submit a proposal to resample the well. If the well is not contaminated, it may be sealed. If the well is contaminated, a proposal to address the contamination will be required.

III Other Technical Requirements

USEPA Rules for PCB Disposal

1. Please be advised that the United States Environmental Protection Agency (USEPA) has issued final rules for disposal of Polychlorinated Biphenyls (PCBs). These rules appeared in the Federal Register on June 29, 1998 (Volume 63, Number 124). In order for the NJDEP to approve a remediation including PCBs, Hexcel shall provide documentation that it has complied with these rules.

To review the referenced rules please refer to the following Internet address: www.epa.gov\fedrgstr\EPA-TOX\1998\June\Day-29\t17048.htm

Be advised that according to the rules any remediation which is intended to leave PCBs at levels of 100 ppm or more must be reviewed and approved by the USEPA.

Baseline Ecological Evaluation

2. Hexcel proposes to conduct and ecological evaluation pursuant to the Technical Requirements for Site Remediation 7:26E-3.11 and 4.7. The proposal is acceptable.

IV General Requirements

- 1. Hexcel shall submit the results or additional work plans, in triplicate. Please note that only one copy of the Quality Assurance/Quality Control Deliverables is needed.
- 2. Hexcel shall submit a revised Remedial Action Schedule, pursuant to N.J.A.C. 7:26E-6.5, for NJDEP approval which includes all tasks associated with the remediation of the site within thirty (30) calendar days of the receipt of this letter.
- 3. Hexcel shall submit summarized analytical results in accordance with the Technical Requirements For Site Remediation (TRSR), N.J.A.C. 7:26E.
- 4. Hexcel shall collect and analyze all samples in accordance with the sampling protocol outlined in the May, 1992 edition of the NJDEP's "Field Sampling Procedures Manual" and the TRSR, N.J.A.C. 7:26E.

- 5. Hexcel shall notify the assigned BEECRA Case Manager at least 14 calendar days prior to implementation of all field activities included in the Remedial Action Workplan. If Hexcel fails to initiate sampling within 30 calendar days of the receipt of this approval, any requests for an extension of the required time frames may be denied.
- 6. Pursuant to the TRSR, N.J.A.C. 7:26E-3.13(c)3v, all analytical data shall be presented both as a hard copy and an electronic deliverable using the database format outlined in detail in the current HAZSITE application or appropriate spreadsheet format specified in the NJDEP's electronic data interchange manual.

For further information related to electronic data submissions, please refer to the Site Remediation Program's (SRP's) home page at the following internet address: http://www.state.nj.us/dep/srp. The Regulations and Guidance page of this web site has a section dedicated to HazSite which includes downloadable files, an explanation of how to use these files to comply with the NJDEP's requirements, the SRP's Electronic Data Interchange (EDI) manual, and Guidance for the Submission and Use of Data In GIS Compatible Formats Pursuant to "Technical Requirements for Site Remediation".

7. Pursuant to N.J.S.A. 58:10B-3, a remediation funding source is to be established in an amount equal to or greater than the cost estimate of the implementation of the remediation and shall be in effect for a term not less than the actual time necessary to perform the remediation at the site. N.J.S.A. 58:10B-3 allows for a change of the amount in the remediation funding source as the cost estimate changes. In the November 23, 1999 RAW addendum Hexcel submitted a revised cost estimate of \$4,700,000. Therefore, Hexcel shall increase the remediation funding source to the amount of this new estimate.

If you have any questions, please contact the Case Manager, Joseph J. Nowak, at (609) 292-0130.

Sincerely,

Michael A. Justiniano, Supervisor Bureau of Environmental Evaluation, Cleanup and Responsibility Assessment

c: Kris Geller, BEERA
Beverly Phillips, BGWPA
A. William Nosil, Hexcel Corporation
Bergen County Department of Health Services
Gary Paparozzi, Mayor, Borough of Lodi
Stephen Lo Iacono, Jr., Lodi Municipal Manager
Joseph Savarese, Haley & Aldrich
Norman W. Spindel, Lowenstein Sandler PC